

WHAT IS CLAIMED IS:

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An image pickup apparatus comprising:
an image pickup device;

correction reference signal generation means for
generating a correction reference signal from output
signals of a vertical optical black pixel portion of the
image pickup device, for correcting effective image signals
outputted as signal of an effective pixel portion of said
image pickup device;

image signal correction means for subtracting said
correction reference signal from said effective image
signals; and

image pickup device drive means having a plurality
of drive modes for driving said image pickup device to read
pixel charge as an output signal;

wherein said correction reference signal generation
means performing different types of correction reference
signal generation processing in generating the reference
signal, corresponding to the plurality of drive modes of
said image pickup device drive means.

2. The image pickup apparatus according to claim 1,
wherein one of said plurality of drive modes is a normal
drive mode for severally reading out each pixel charge of

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correction means for subtracting a readout signal of said optically shielded pixel region from a readout signal of said effective pixel region of said image pickup device.

5. The image pickup apparatus according to claim 4, wherein said plurality of readout modes of said drive means comprise a first readout mode for severally reading all the pixels in the effective pixel region and a second readout mode for reading by adding vertically a string of pixels of a predetermined number greater than two in said effective pixel region.

6. The image pickup apparatus according to claim 4, wherein said plurality of readout modes of said drive means comprises a dynamic image taking mode and a still image taking mode.

7. The image pickup apparatus according to claim 4, wherein said optically shielded pixel region comprises a predetermined number of horizontal pixel rows.

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